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(19) **United States**(12) **Patent Application Publication**
CAI et al.(10) Pub. No.: **US 2001/0049770 A1**(43) Pub. Date: **Dec. 6, 2001**(54) **BUFFER MEMORY MANAGEMENT IN A
SYSTEM HAVING MULTIPLE EXECUTION
ENTITIES**(21) Appl. No.: **09/207,278**(22) Filed: **Dec. 8, 1998**(76) Inventors: **ZHONG-NING CAI, PORTLAND, OR
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711/122**

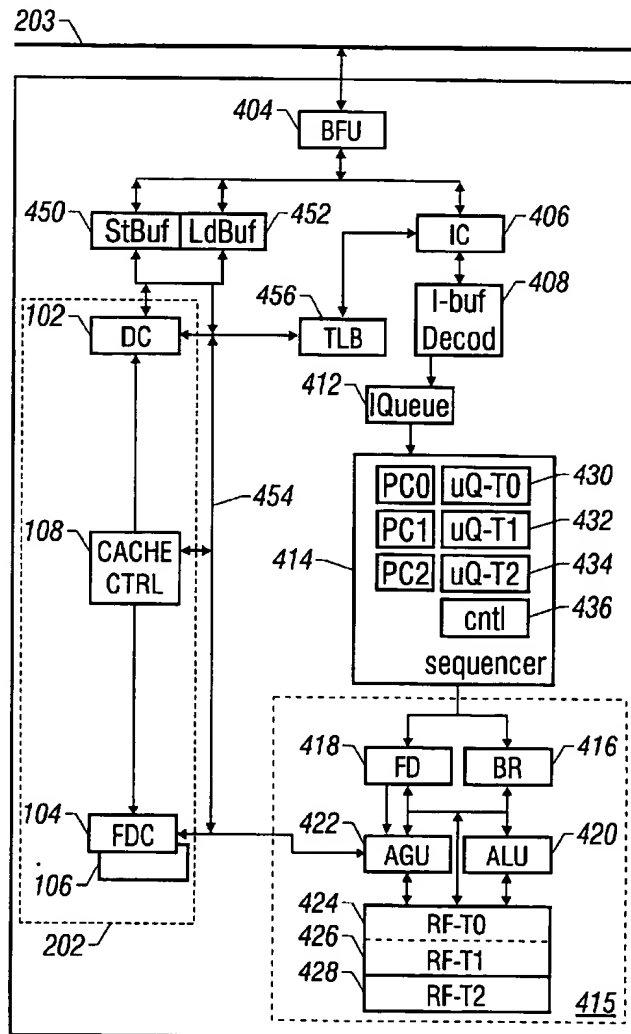
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(57) **ABSTRACT**

A system includes multiple program execution entities (e.g., tasks, processes, threads, and the like) and a cache memory having multiple sections. An identifier is assigned to each execution entity. An instruction of one of the execution entities is retrieved and an associated identifier is decoded. Information associated with the instruction is stored in one of the cache sections based on the identifier.



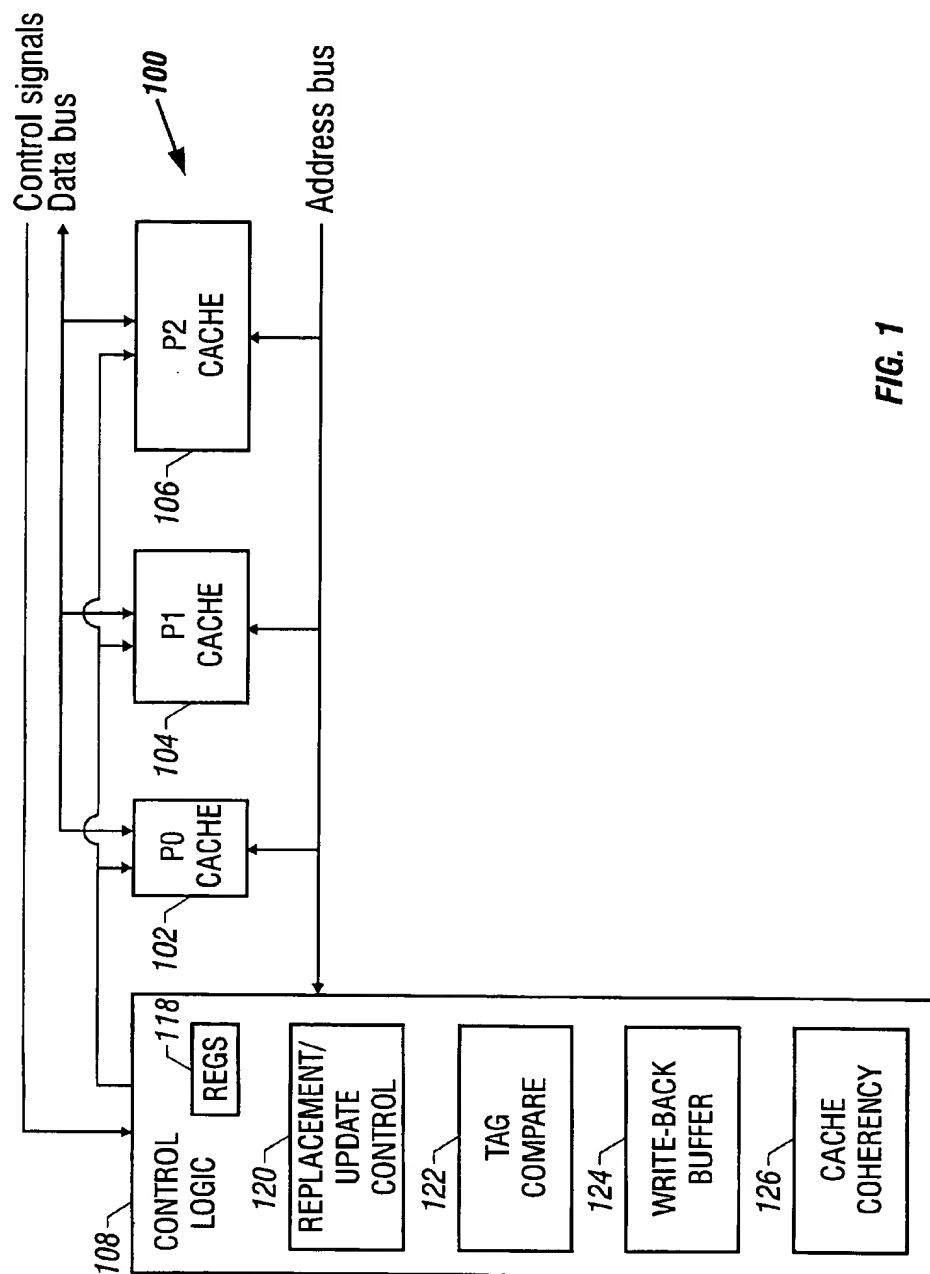


FIG. 1

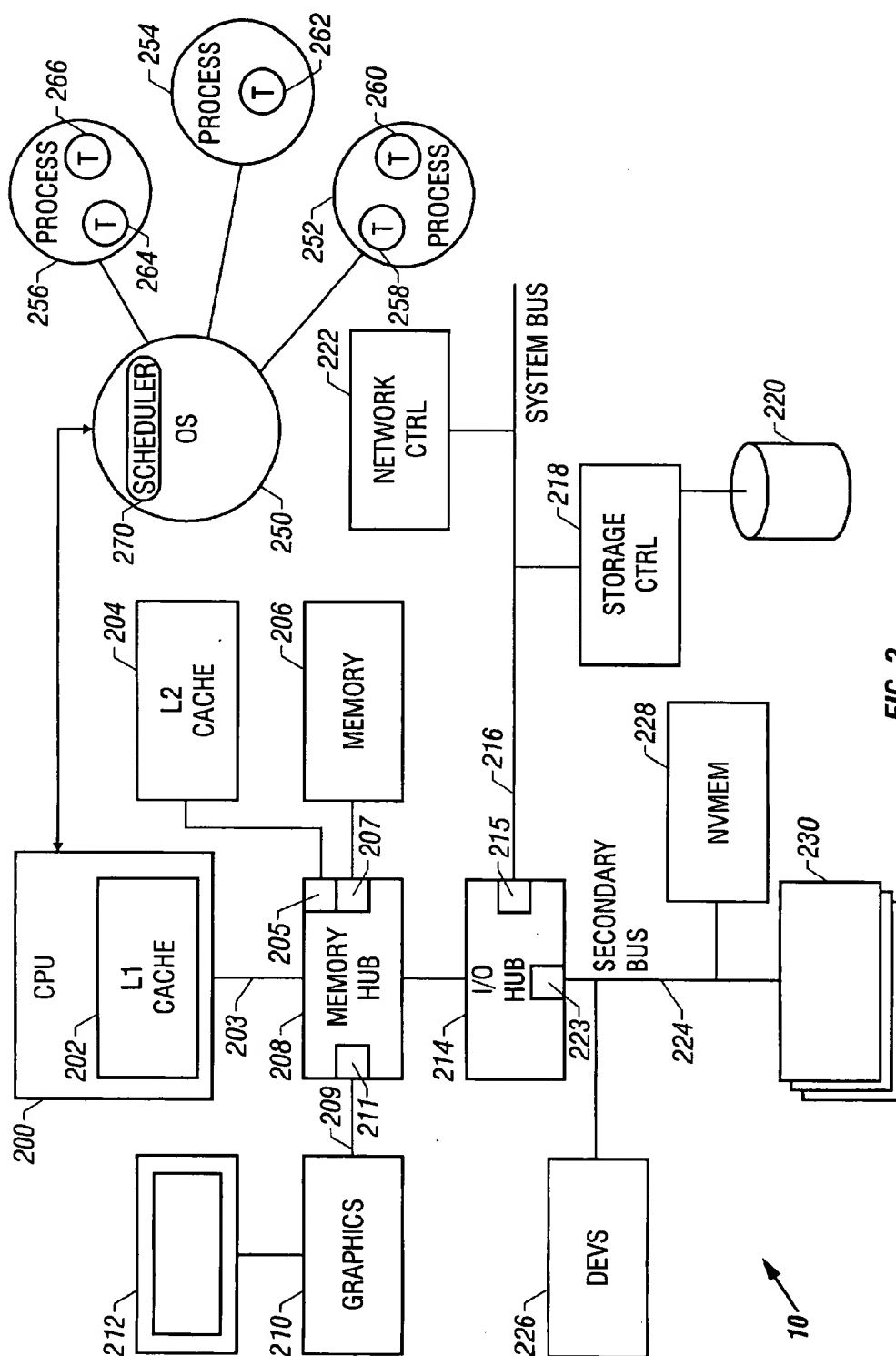


FIG. 2

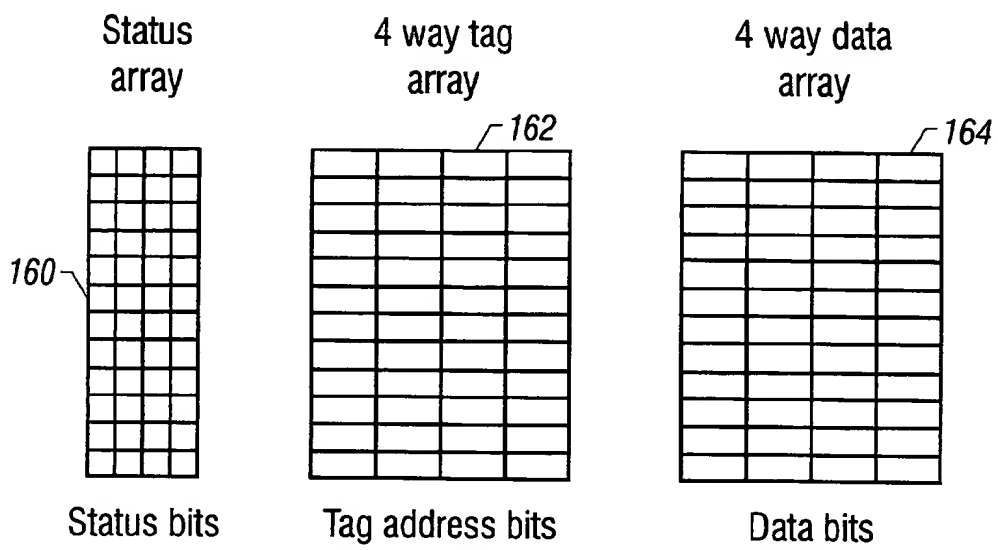


FIG. 3

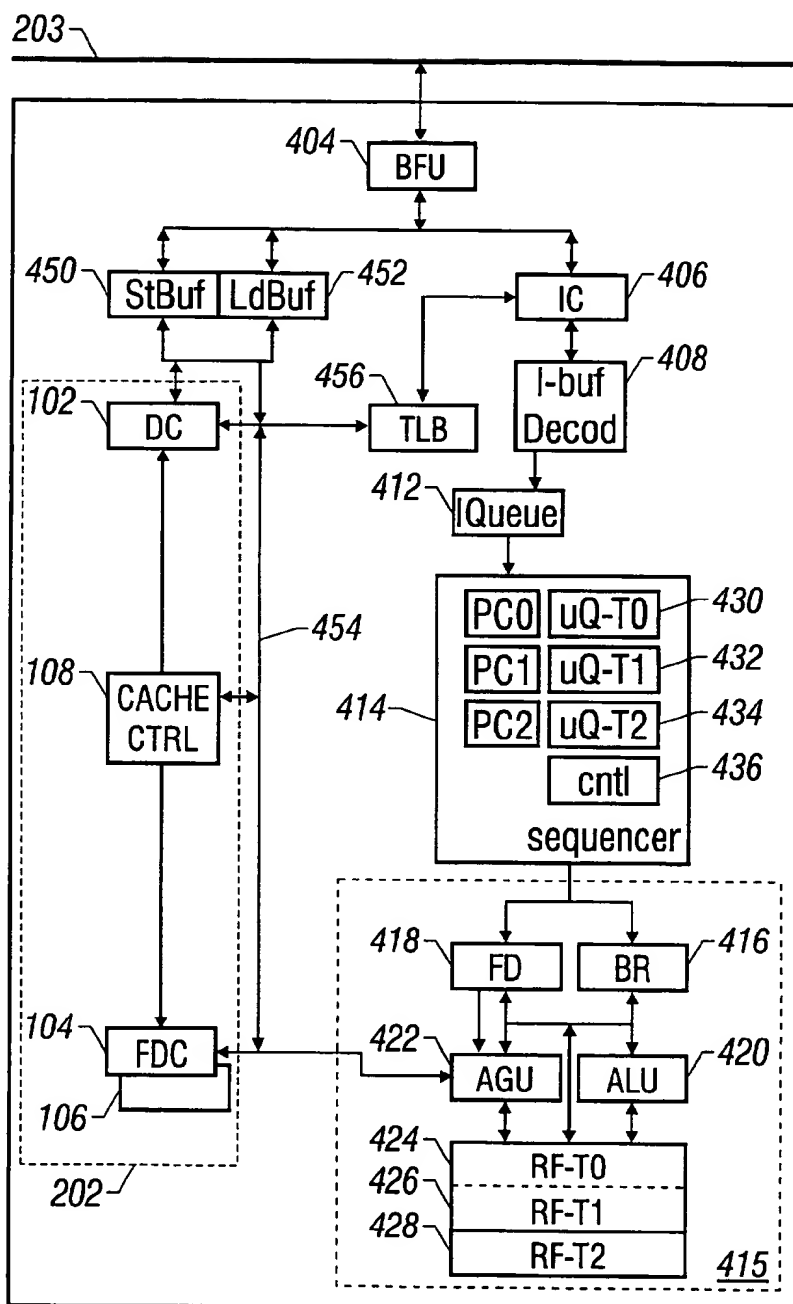


FIG. 4

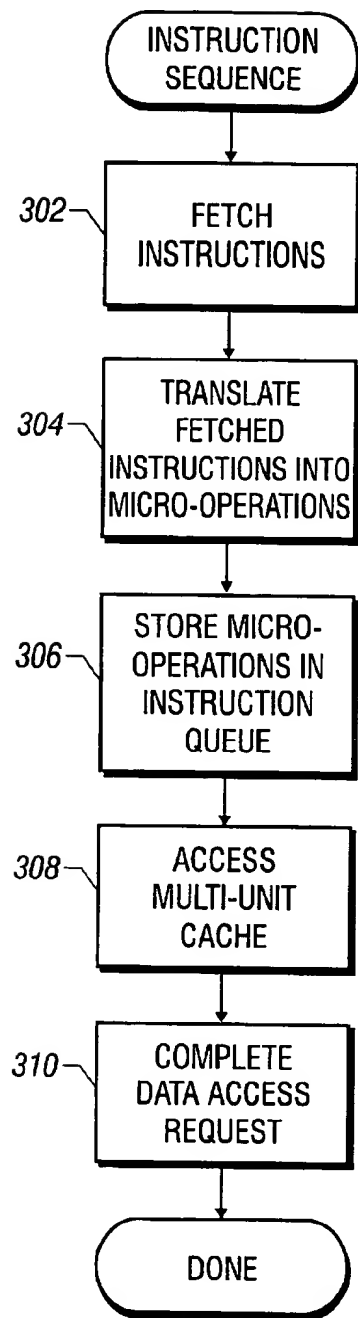


FIG. 5

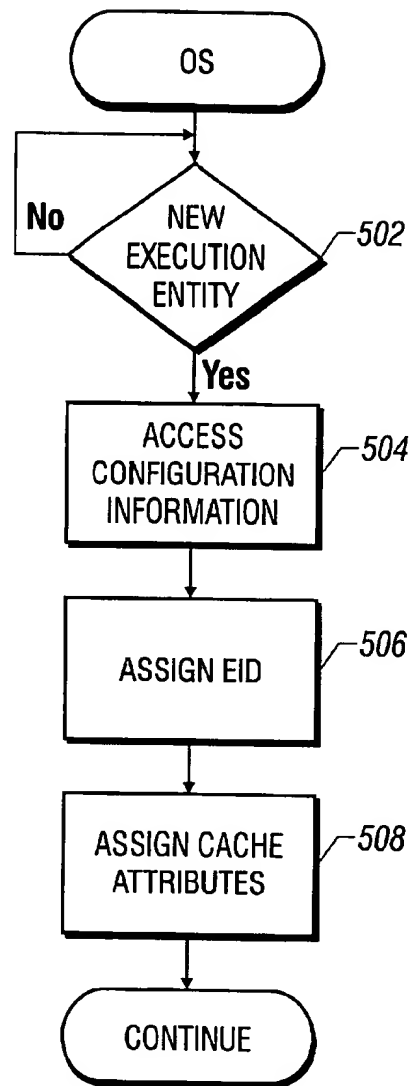


FIG. 6